Annual Program Report

Program Name:	**Bachelor in Computer Sciences code-010201**
Qualification Level:	**Graduate in Computer Science**
Department:	**Computer Science**
College:	**College of Arts and Science Al-Majardah**
Institution:	**King Khalid University**
Academic Year:	**2021-2022 (Sem-1-2)**
Main Location:	**Ministry of Education or Higher Council of Education**
Branches offering the Program:	● **Bachelor of Computer Science**
Quality Coordinator CS	**Dr. Nirmla Sharma**

Table of Contents

A. Implementation of Previous Action Plan

Considering the recommendations of previous year annual report, list the planned actions and their status.

Planned Actions	Responsibility of Action	Planned Completion Date	Level of Completion		If Not Completed	
			Completed	Not Completed	Reasons	Proposed Actions
1. Self-Learning reference website / videos about how to write programs shall be introduced.	Course Teacher	Beginning of the first semester 1443 H	yes			
2. Laboratory manual was updated to introduce algorithmic principles for designing hardware interfacing programs.	Lab In charge	Beginning of the first semester 1443 H	yes			
3. Educational the library with the planned books and the most modern references associated to the program in support of the courses	Head of Development and Quality Unit - Head of Department - Program Coordinator	Beginning of the first semester 1443 H	Almost complete			
4. Students are encouraged KKU website to be familiar with the current trends in the computer Science discipline	Course Teacher & website in charge	Beginning of the first semester 1443 H	Yes			
5.A group project can be given to the students to assess KPI Introduce more team work assessment	HOD & Supervisor	Beginning of the first semester 1443 H	Yes			
6.Initiate the formation of professional and technical societies	Course Teacher & dept. members	Beginning of the first semester 1443 H	Almost done			
7.Lecture Notes are uploaded in the E-Learning and References are often discussed in the class rooms relevant to each topic.	Course Teacher & dept. members	Beginning of the first semester 1443 H	Yes			

B. Program Statistics

1. Students Statistics (in the year concerned)

No.	Item	Results
1	Number of students who started the program	110
2	Number of students who graduated	27+49=76
3	Number of students who completed major tracks within the program (if applicable)	
	a.	
	b	
	c.	5
4	a. Number of students who completed the program in the minimal time	4
5	a. Percentage of students who completed the program in the minimal time (Completion rate)	100%
6	Number of students who completed an intermediate award specified as an early exit point (if any)	_

7	Percentage of students who completed an intermediate award specified as an early exit point (if any)	NA

Comment on any special or unusual factors that might have affected the completion rates:

2 . Cohort Analysis of Current Graduate Batch

Student Categories / Years		Total cohort enrollment	Withdrawn	Retained till year end	Not passed	Passed	Passing rate
Five Years Ago(2016-17)	M						
	F	71	1	0	0	70	98
	Total						
Four Years Ago(2017-18)	M						
	F	70	2	0	0	68	97
	Total						
Three Years Ago(2018-19)	M						
	F	68	1	0	0	67	98
	Total						
Two Year Year(2019-20)	M						
	F	67	1	3	0	63	94
	Total						
Last Year (2020-21)	M						
	F	63	0	0	0	63	100
	Total						
Current Year (2021-22)	M						
	F	76	0	0	0	76	100
	Total						

Comments on the results: When some of the exams were conducted in College due to high inflation in A+ grade, then many students withdrew their courses and it effected the completion rate.
But online (E-Learning all 100% result).
Attendance result is also good.

* add more rows for further years (if needed)
** attach separate cohort analysis report for each branch

3.Analysis of Program Statistics
(including strengths, areas for improvement, and priorities for improvement)

Strengths :

The program stimulates students to further research and study.
- Acquire teamwork skills
- The program is useful in practical life
-The program develops student research skills Suggestions & Optimization
-Workshops
- Trainings
- Presentation

Areas for Improvement:

It was extracted all the points of the questionnaire Involve alumni more in opinion polls about the mission of the university
* Spread the message wider among graduates and students before graduation.

* Increase the number of meetings tariff on university programs to the region's schools at the secondary level (units can serve the community organizing workshops on university programs)
* Work to link the decisions and appropriate labor market and increase application that prepare them to face the labor market.
* Ensure that is offered to the students feedback about their performance in the program.
Develop classroom is urged member and affiliated fared with regard to the use of modern means.
*Present the small project also

Priorities for Improvement:

i.   The LO's to be evaluated by stakeholders for continuous enhancement.

ii.   A professional advisory panel to be formed from export and alumni to advice on content, quality of program, continuous improvement and program development

iii.   Number of text books and reference books are to be increased

iv.   Identification of weaknesses and strengths of effective methodology has to be documented

v.   Provide periodical training for faculty professional and academic development

vi.   Motivate the faculty members to participate scholarly activities in the department

vii.   Organize orientation and training program for new faculty about quality of teaching and e-learning.

C. Program Learning Outcomes Assessment

1. Program Learning Outcomes Assessment Results.

#	Program Learning Outcomes	Assessment Methods (Direct and Indirect)	Performance Target	Results
Knowledge and Understanding				
K1	Define mathematical concepts, algorithmic principles, and computer science fundamentals (a1)	Exams, Long and Short Essays, Peer Evaluations and tutorial/lab exercises	V. good	V. good
K2	Recognize mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computer-based systems in a way that demonstrates comprehension of the tradeoffs involved in design choices (a2)	Exams, Long and Short Essays, Projects, Seminars and Practical exercises E-learning	V. good	V. good
K3				
K4				
K. .				
Skills				
S1	Design and development principles in the construction of software systems of varying complexity. (b1)	Reports and Individual and group presentation, Tables, Graphs, e-learning	V. good	V. good
S2	Design, implement and evaluate a computer-based system, process, component, or program to meet desired needs. (b2)	Exams, Peer Evaluations, Long and Short Essays and Practical exercises and laboratory reports, Presentation and Posters	V. good	V. good
S3	Analyze a problem, and identify and define the computing requirements appropriate to its solution. (b3)	Exams, Peer Evaluations, Individual and group presentation and Posters, e-learning	V. good	V. good
S4	Analyze the local and global impact of computing on individuals, organizations, and society. (b4)	Graduation projects , Individual and group presentation. Group	V. good	V. good

		Report, Videos and Posters, e-learning		
S..	Design and development principles in the construction of software systems of varying complexity. (b1)	Reports and Individual and group presentation, Tables, Graphs, e-learning	V. good	V. good
Values				
V 1	Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.	Long and Short Essays, Presentation, mini-projects, graduation projects, technical report, Lab Manual, e-learning	V. good	V. good
V 2	Function effectively as a member or leader of a team engaged in activities related to information systems.	Presentation, mini-projects, graduation projects, Demonstrations and Seminar, e-learning	V. good	V. good
V 3	Explore recent technologies as needed, using appropriate lifelong learning strategies.	Exam, Practical exercises, Presentation, graduation projects, and Seminar, e-learning	V. good	V. good
V 4				
V..				
Comments on the Program Learning Outcome Assessment results.				
In spite of new methodologies of teaching for teachers and learning challenges for students , overall it was good.				

* Include the results of measured learning outcomes during the year of the report according to the program plan for measuring learning outcomes

** Attach a separate report on the program learning outcomes assessment results for male and female sections and for each branch (if any)

2. Analysis of Program Learning Outcomes Assessment
(including strengths, Areas for Improvement:, and priorities for improvement)

Strengths :
All the outcomes were achieved comfortably.
Students are good at application part of the skills, such as problem analysis, requirements collection, design and implementation,
Students have satisfactory soft skills, such as communication, teamwork, leadership, etc.
Students show motivation in learning and participation in community service.
Outcomes related to technology were achieved maximum.
Areas for Improvement:
Students retention of knowledge
Students awareness of contemporary issues and technologies
Students ability to evaluate case-studies
Unreliable learning outcomes due to online assessments and tests.
Priorities for Improvement:
Students retention of knowledge
Students awareness of contemporary issues and technologies
Students ability to evaluate case-studies
To control cheating, and some rules to check the students demand for A+

D. Summary of Course Reports

1. Teaching of Planned Courses / Units
List the courses / units that were planned and not taught during the academic year, indicating the reasons and compensating actions.

Semester -1 -2021
Semester-1 Open Course

Course	Units/Topics	Reasons	Compensating Actions
Computational Geometry	Level-4	Take it	Students-10
Algorithm and data structure-1	Level-4	Take it	Students-8
Introduction to Information System	Level-4	Take it	Students-7
Programming Language 278 CSM	Level-6	Take it	Students-14
Data Warehousing and Data Mining	Level-6	Take it	Students-8
Computer Organization	Level -8	Take it	Students-5
Operating System-11	Level -8	Take it	Students-40
SE-1	Level -8	Take it	Students-10
Internet Technologies	Level -8	Take it	Students-10
Analysis and design of algorithms	Level-10	Take it	Students-10
Expert system	Level-10	Take it	Students-29
Selected Topic	Level-10	Take it	Students-41
Project-2	Level-10	Take it	Students-27
Open Couse Sem-2 2022			
	Level-1	Take it	Students -
Introduction To information System	Level-3	Take it	Students-2
OS-1	Level-5	Take it	Students-17
Data Structures and Algorithms - II	Level-5	Take it	Students-7
Database Management Systems	Level-5	Take it	Students-15
(old) Discrete Structure	Level-5	Take it	Students-1
AI	Level-7	Take it	Students-
(New) Discrete Structure	Level-7	Take it	Students-2
Compiler	Level-7	Take it	Students-
Computer Networks-2	Level-9	Take it	Students-59
Multimedia	Level-9	Take it	Students-12
SPM	Level-9	Take it	Students-13
SE-2	Level-9	Take it	Students-

2. Courses with Variations

List courses with marked variations in results that are stated in the course reports, including: (completion rate, grade distribution, student results, etc.), and giving reasons for these variations and actions taken for improvement.

Course Name &Code	variation	Reasons for variation	Actions taken
Introduction to Computer /011 CS	yes		Yes
Programming Language 1/012 CS	yes		Yes
Computer Programming 2/113 CS	yes		Yes
Object Oriented Programming /114 CS	yes		Yes
Algorithm & Data Structure /115 CS			Yes
Computational Geometry /131 CS			Yes
Algorithms and Data Structures 2/216 CS	yes		Yes
Statistical Programming /217 CS			Yes
Simulation Modeling /233 CS			Yes
Computer Org. & Arch. 251-CCS-3	yes		yes

3. Result Analysis of Course Reports

(including strengths, Areas for Improvement:, and priorities for improvement)

Sem-1-2021

Course	Code	No of students					Pass	Fail
		A	B	C	D	Withdrawn		
Level-1								
Introduction to computing	111cs-3	19	21	26	12	4	79	3
Calculus-1	Math108							
Intensive English	011Eng-6	4	29	32	8	1	73	1
Level-3								
Principal of Physics	211Phys	10	4	7	23	0	44	4
Linear Algebra	113-MATH-3							
OOPs	222-CCS-4	10	9	13	12	5	45	1
Computer Org. & Arch.	251-CCS-3	8	5	11	16	9	40	11
Communication Skills	139-BUS-2							
Level-5								
Image Processing	312 CCS	23	20	9	7	0	59	1
Principal Of SE	CCS 233	1	10	29	9	4	49	6

Course	Code	A	B	C	D	E	Pass	Fail	With Draw/D
data communication and network	222CSM	9	27	12	4	3	52	0	
Discrete Structured	216 CSM	10	16	13	11	4	50	3	
Operating System	381 CCS	5	13	19	15	1	52	2	
Micro Processor and Asembly Lang	352-CCS-3	5	16	21	8	6	50	3	
Level-7									
Computer Networks-1	364CSM	34	17	20	12	2	83	2	
Artificial Intelligence	357 CSM3	6	5	6	9	5	26	5	
Discrete Structures	CSM 337	7	29	28	22	0	86	2	
Micro Processor and Assembly Lang	CSM 343	18	17	12	8	0	55	0	
Theory of Compilers	CSM 345	6	9	20	25	3	60	9	
Level-9									
Computer Netwoks-2	463 CSM	16	5	6	2	0	25	0	
Multimedia	435ISM3	5	3	4	7	3	19	2	
Software Project Management	CSM 472	0	2	4	4	2	10	1	
Software Engineering II	CSM 473	3	4	13	11	0	34	0	
Project-1	483-CSM	21	0	0	0	0	21	0	
Project-2	484-CSM	13	0	0	0	0	13	0	
Project-2	483-CSM	14	0	0	0	0	14	0	

Sem-2-2022

Course	Code	No of students					Pass	Fail	With Draw/D
		A	B	C	D	E			
Level-2									
Introduction to programming	121-CCS-3								
Islamic Culture 2	112-ICI-2	-	-	-	-	-	--	-	-
Calculus 2	109-MATH-3								
Arabic Editing	202-ARAB-2	-	-	-	-	-	--	-	-
Intensive English Program 2	012-ENG-6								
Level-4									
Chemistry	109-CHEM-3								
Islamic Culture (4)	214-ICI-2								
Probability and Statistics	339-MATH-3								
Data Structures & Algorithms	231-CCS-4								
Introduction to Databases	231-CIS-3								
Advanced Object Oriented Programming	223-CCS-3								
OOP	114 –CSM(old)								
Level-6									

Course	Code								
Artificial Intelligence	361-CCS-3								
Programming with Python	324-CCS-3								
Computer and Network Security	453-CIS-3								
Web Engineering	373-CCS-3								
Game Development	313-CCS-3								
Operations Research	314-CCS-3	37	8	5	3	0	1	53	3
Level-8									
Computer Graphics	334CSM								
Computer Organization	344-CSM								
Operating System-11	352CSM	13	14	5	6	0	38	2	0
SE-1	371CSM								
Internet Technologies	362ISM-3								
Level-10									
Expert System	476CSM								
Design and Analysis of Algorithms	474CSM								
Computer Ethics	ISM_CS362								
Selected Topic	482CSM								
Seminar	481CSM	7	6	3	0	0	15	0	3
Project-2 Dr. Manahel	484CSM	15	0	0	0	0	15	0	0
Project-2 Dr. Olfa	484CSM								
Project-2 Dr. Hosam	484CSM								

Strengths :	
Excellent	
Less failures. Inflation is controlled in the 1-2- semester 2021-2022	
Areas for Improvement:	
1-Activation of class interactions raises students' motivation to learn.	
2-concentrated on the scientific discussion that have big effect to get the objectives	
3-flow up the students on the lecture to be sure that they get the concept of the lecture	
4-make all my effort to get the Sensory stimuli and moral push by the student to search for knowledge themselves	
Priorities for Improvement:	
E-Learning, workshops and Training Seminar and small projects &t big projects	

E. Program Activities

1. Student Counseling and Support

Activities Implemented	*Brief Description
Orientation programs	The admission system together with the relevant information is to be made available to the prospective students/academic advisor
Extra activities Student Admissions	Student admission at the university is effective and easy through the use of computer and website in accordance with clear criteria. The university also provides students guides and advertise the standards of admitting its students
Student Records	The university provides effective protection to student records in a programmed electronic means to provide student records archives in the university. It also has clear policies and regulations to keep the information in these files secret

Completions Student Management	The university formulates rules and regulations that guarantee availability of fair and regular administrative procedures for student affairs whereby the University Council approves codes of conduct and takes disciplinary actions which are documented
Sports activities	Ground and courts

Comment on Student Counseling and Support **

In the university there are staff members with the necessary professional qualifications to render counsel students and students can have access to these services easily. The university has more in the establishment of sports venues, advising training and has conducive places for class activities and grant suitable awards to participants. Student Advisement System needs to be strengthen by providing necessary training to student advisors and documenting/publishing the student advisement process. Further, a diagrammatic chart showing the complete flow chart of the study plan for the desired program should be made available to both students as well as advisors. Career planning cell, comprising of Students' Advisors, distinguished alumni and members of Industry Advisory Board, may be constituted to provide proper counseling and necessary assistance to the students related to their professional career planning
The training program was useful for the staff for developing their teaching skills, learning skills research skill and quality management skills, e –learning skill tools

* including action time, number of participants, results and any other statistics.
** including performance evaluation on these activities

2. Professional Development Activities for Faculty and Other Staff

Activities Implemented	*Brief Description
Scientific forum conducted	18=16+2
Training program attended	38=28+10
Quality training program attended	23=15+8
Research program attended	16=8+8
Scientific Seminar conducted	10=7+3

Comment on Professional Development Activities for Faculty and Other Staff **

Black board training classes
Installation of software
Podcasting
Preparing online test

* including action time, number of participants, results and any other statistics.
** including performance evaluation on these activities

3. Research and Innovation

Activities Implemented	*Brief Description
International Journal Papers	40=30+10
Book	1
Chapters	3=2+1
Conferences	10=5+5
Workshops	17=7+10
Research Projects	1

Comment on Research and Innovation **

Overall it was a very creative and effective year for teachers and students both, as a lot of workshops and activities boosted confidence and discovered the hidden talents of the members and students. Research for professional growth and research is evident. However, more needs to done it.

* including action time, number of participants, results and any other statistics.
** including performance evaluation on these activities

4. Community Partnership

Activities Implemented	*Brief Description
Policies on Community Relationships	Offering short-term skill oriented programs in coordination with concerned deanship provides ample evidence to support community service and relationship
Interactions with the Community	Involvement of many staff members in the local industries shows the .interaction with the community
Online workshops in a lot of dimensions were done	The most successful was the INITIATIVES, continued for the 1st semester
**Comment on Community Partnership **	
Offers many short-term skill oriented programs and staffs share their expertise with local	

* including action time, number of participants, results and any other statistics.
** including performance evaluation on these activities

5. Analysis of Program Activities
(including strengths, Areas for Improvement:, and priorities for improvement)

Strengths :
Excellence is improved both areas
New things learnt
Due to attending training and workshops students skills improved
Practical part is improved.
Areas for Improvement:
The feedback system and its systematic approach to be design and implemented.
Priorities for Improvement:
The alternative planning strategies to be decided with clear criteria for evaluation of progress towards the goals and objectives of the program

F. Program Evaluation

1. Evaluation of Courses(Old Plan -5- Years)

Course Code	Course Title	Student Evaluation (Yes-No)	Other Evaluations (specify)	Developmental Recommendations
111 CS	Introduction to Computing	Yes		
012 CS	Programming Language 1	Yes		
113 CS	Computer Programming 2/	Yes		
222 CS	Object Oriented Programming	Yes		
115 CS	Algorithm & Data Structure	Yes		
131 CS	Computational Geometry	Yes		
216 CS	Algorithms and Data Structures 2	Yes		
217 CS	Statistical Programming	Yes		
233 CS	Simulation Modeling	Yes		
234 CS	Computer Vision	Yes		
236 CS	Combinatorial Analysis of Computer	Yes		
241 CS	Digital Logic	Yes		
251 CS	Operating System 1	Yes		

Course Code	Course Title	Student Evaluation (Yes-No)	Other Evaluations (specify)	Developmental Recommendations
278 CS	Programming Language Concepts	Yes		
334 CS	Computer Graphics	Yes		
233 CS	Simulation Modeling	Yes		
234 CS	Computer Vision	Yes		
236 CS	Combinatorial Analysis of Computer	Yes		
241 CS	Digital Logic	Yes		
251 CS	Operating System 1	Yes		
278 CS	Programming Language Concepts	Yes		
334 CS	Computer Graphics	Yes		
337 CS	Discrete Structure	Yes		
343 CS	Microprocessors	Yes		
344 CS	Computer Organization	Yes		
345 CS	Theory of Compilers	Yes		
352 CS	Operating System 2	Yes		
364 CS	Computer Networks 1	Yes		
371 CS	Software Engineering 1	Yes		
375 CS	Introduction to Artificial Intelligence	Yes		
463 CS	Computer Networks 2	Yes		
472 CS	Software Project Management	Yes		
473 CS	Software Engineering 2	Yes		
474 CS	Design & Analysis of Algorithms	Yes		
476 CS	Expert System & Knowledge Engineering	Yes		
481 CS	Seminar	Yes		
482 CS	Selected Topic	Yes		
483 CS	Project - 1	Yes		
484 CS	Project - 2	Yes		

*Evaluation of Courses (Start-2019-New plan 4-Years)

Sub. Code	Subject	TH	L	Credit	Pre-requisite
Semester 1					
111-CCS-3	Introduction to Computing	2	1	3	
111-ICI-2	The Entrance to the Islamic Culture 1	2		2	
108-MATH-3	Calculus 1	3		3	
201-ARAB-2	Arabic Language Skills	2		2	
011-ENG-6	Intensive English Program 1	6		6	
	Sub Total Credit	15	1	**16**	

	Semester 2				
121-CCS-3	Introduction to programming	2	1	3	111-CCS-3
112-ICI-2	Islamic Culture 2	2		2	111-ICI-2
109-MATH-3	Calculus 2	3		3	108-MATH-3
202-ARAB-2	Arabic Editing	2		2	
012-ENG-6	Intensive English Program 2	6		6	011-ENG-6
	Sub Total Credit	15	1	**16**	
	Semester 3				
211-PHY-4	Principles of Physics	3	1	4	
113-ICI-2	Islamic Culture (3)	2		2	112-ICI-2
113-MATH-3	Linear Algebra	3		3	
222-CCS-4	Object Oriented Programming	3	1	6	121-CCS-3
251-CCS-3	Computer Organization and Architecture	3		3	
139-BUS-2	Communication Skills	2		2	
	Sub Total Credit	16	2	**18**	
	Semester 4				
109-CHEM-3	Chemistry	2	1	3	
214-ICI-2	Islamic Culture (4)	2		2	113-ICI-2
339-MATH-3	Probability and Statistics	3		3	109-MATH-3
231-CCS-4	Data Structures & Algorithms	3	1	4	222-CCS-3
231-CIS-3	Introduction to Databases	2	1	3	
223-CCS-3	Advanced Object Oriented Programming	2	1	3	222-CCS-3
	Sub Total Credit	14	4	**18**	
	Semester 5				
133-CCE-3	Discrete Structures	3		3	
341-CCS-3	Principles of Software Engineering	2	1	3	222-CCS-3
381-CCS-3	Operating Systems	2	1	3	231-CCS-3
352-CCS-3	Microprocessor and Assembly Language	2	1	3	251-CCS-3
371-CCS-3	Data Communication and Computer Networks	2	1	3	222-CCS-3
312-CCS-3	Image Processing	2	1	3	133-CCE-3
	Sub Total Credit	13	5	**18**	
	Semester 6				

361-CCS-3	Artificial Intelligence	2	1	3	231-CCS-3
324-CCS-3	Programming with Python	2	1	3	222-CCS-3
453-CIS-3	Computer and Network Security	2	1	3	371-CCS-3
373-CCS-3	Web Engineering	2	1	3	222-CCS-3
313-CCS-3	Game Development	2	1	3	222-CCS-3
314-CCS-3	Operations Research	2	1	3	231-CCS-3
	Sub Total Credit	12	6	**18**	
491-CCS-0	**Summer Training**	0		0	64 credit hours
Semester 7					
462-CCS-3	Introduction to Machine Learning	2	1	3	361-CCS-3
425-CCS-2	Programming Paradigms	2	0	2	324-CCS-3
	Common Elective 1– (College level)	**2**	**1**	**3**	
	Elective -1	2	1	3	
492-CCS-3	Project -1	3		3	491-CCS-3
432-CCS-3	Design and Analysis of Algorithms	2	1	3	331-CCS-3
	Sub Total Credit	13	4	**17**	
Semester 8					
414-CCS-3	Theory of Compiler	2	1	3	425-CCS-2
482-CCS-3	Parallel and Distributed Computing	2	1	3	381-CCS-3
483-CIS-2	Computing Ethics	2		2	
	Common Elective 2 – (College level)	3		3	
	Elective – 2	2	1	3	
493-CCS-3	Project 2	2	1	3	492-CCS-3
	Sub Total Credit	13	4	**17**	
	Total			*318*	

2. Students Evaluation of Program Quality

Evaluation Date :	Number of Participants:
Students Feedback	**Program Response**
Strengths: ● Case study , Small Project ● Extra Activates	Professor
Areas for Improvement:: ● Attend workshops ● Present workshops	Professor
Suggestions for improvement: ● Training and workshop attend & Present ● Certificates	Professor

* Attach report on the students evaluation of program quality

3. Other Evaluations

(e.g. Evaluations by independent reviewer, program advisory committee, and stakeholders (e.g., faculty members, alumni, and employers)

Evaluation method : Date:	Number of Participants :
Summary of Evaluator Review	**Program Response**
Strengths:	Professor

● Case study ● Extra Activates	
Points for Improvements:: ● Attend workshops ● Present workshops	Professor
Suggestions for improvement ● Training ● Certificates	Professor

* Attach independent reviewer's report and stakeholders' survey reports (if any)

4. Key Performance Indicators (KPIs)

List the results of the program key performance indicators (including the key performance indicators required by the National Center for Academic Accreditation and evaluation)

No	KPI	Target Benchmark	Actual Value	Internal Benchmark	Analysis	New Target Benchmark
1	Goal and vision-Define mathematical concepts, algorithmic principles, and computer science fundamentals	4.2	4	4	y	4.4
2	Recognize mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computer-based systems in a way that demonstrates comprehension of the tradeoffs involved in design choices	4.1	4	3.95	y	4.3
3	Apply design and development principles in the construction of software systems of varying complexity.	4.2	4.1	4.3	y	4.5
4	Design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs	4	3.95	4	y	4.4
5	Analyze a problem, and identify and define the computing requirements appropriate to its solution	4.2	3.95	4	y	4.4
6	Analyze the local and global impact of computing on individuals, organizations, and society	4.4	4.3	4.2	y	4.6
7	Function effectively on multi-disciplinary	4.5	4.6	4.4	y	4.95

	teams to accomplish a common goal					

Comments on the Program KPIs and Benchmarks results :
Regular updates on program required facilities based on facilities monitoring system

5. Analysis of Program Evaluation
(including strengths, Areas for Improvement:, and priorities for improvement)

Strengths :
Excellence is improved both areas
New things learnt
Due to attending training and workshops students skills improved
Practical part is improved.

Areas for Improvement:
The feedback system and its systematic approach to be design and implemented.

Priorities for Improvement:
The alternative planning strategies to be decided with clear criteria for evaluation of progress towards the goals and objectives of the program

G. Difficulties and Challenges Faced Program Management

Difficulties and Challenges	Implications on the Program	Actions Taken
NA		**Partial E-Learning**
None	**Presence**	**Attendance**

*Internal and external difficulties and challenges

H. Program Improvement Plan

No.	Priorities for Improvement	Actions	Action Responsibility	Date Start	Date End	Achievement Indicators	Target Benchmark
1	Increase home work	Yes		29/9/21	7/12/21	yes	yes
2	Internet search	Yes		29/9/21	7/12/21	yes	yes
3	Quizzes	Yes		29/9/21	7/12/21	yes	yes
4	Increase home work	Yes		29/9/21	7/12/21	yes	yes
5	Case Study	Yes		29/9/21	7/12/21	yes	yes
6	Presentation	Yes		29/9/21	7/12/21	yes	yes
Sem-2-2022							
1	Increase home work	Yes		23/1/22	28/4/22	yes	yes
2	Internet search	Yes		23/1/22	28/4/22	yes	yes
3	Quizzes	Yes		23/1/22	28/4/22	yes	yes
4	Increase home work	Yes		23/1/22	28/4/22	yes	yes
5	Case Study	Yes		23/1/22	28/4/22	yes	yes
6	Presentation	Yes		23/1/22	28/4/22	yes	yes

I. Report Approving Authority

Council / Committee	QUALITY UNIT

Reference No.	
Date	13/6/2022

J. Attachments :
- **A separate cohort analysis report for male and female sections and for each branch**
- **A report on the program learning outcomes assessment results for male and female sections and for each branch (if any)**
- **A report on the students evaluation of program quality**
- **Independent reviewer's report and other survey reports (if any)**

<u>**Program Learning Out Comes Below Sem-1-2 2021**</u>

Bachelor's in computer science

Department of computer science

College of Science and Arts, ALmajarda

King Khalid University, KSA

<u>**Program Learning Out Comes Below Sem-1-2 2021-22**</u>

3-A report on the students evaluation of program quality Sem-1 2021

https://docs.google.com/forms/d/1_C2fuEeI41gIsMJVCWcu5IwBf1rIV_A7ToMc2P264aI/edit?usp=drive_web

4- A report on the students evaluation of program quality Sem-2 2022

Submitted by: Dr. Nirmla Sharma   Signature:
                    CS Dept. Al-Majardah